

WHAT IS CLAIMED IS:

1. A radio base station device, comprising:  
a reception unit configured to receive a connection  
5 request from one radio terminal;  
a first allocation unit configured to allocate a first  
media access control identifier which is an unused media  
access control identifier, to said one radio terminal that  
issued the connection request;  
10 a broadcast unit configured to broadcast a  
correspondence between the first media access control  
identifier and said one radio terminal;  
a second allocation unit configured to allocate a  
second media access control identifier to an identifier of  
15 a multicast information that are to be received by a  
plurality of radio terminals;  
a first transmission unit configured to transmit a  
correspondence information for enabling said plurality of  
radio terminals to recognize a correspondence between the  
20 second media access control identifier and the identifier  
of the multicast information; and  
a second transmission unit configured to transmit a  
time-slot corresponding to the first media access control  
identifier with a user information destined to said one  
25 radio terminal loaded thereon, and a time-slot  
corresponding to the second media access control identifier  
with the multicast information loaded thereon.
2. The radio base station device of claim 1, wherein the  
30 first transmission unit transmits the correspondence  
information using a radio control broadcast channel that is  
set to be received by any radio terminal located within an  
area of the radio base station device.
- 35 3. The radio base station device of claim 1, further

comprising a unit configured to obtain information on a correspondence between said one radio terminal and the identifier of the multicast information that said one radio terminal wishes to receive,

5        wherein the first transmission unit transmits the correspondence information to said one radio terminal, using either a radio control broadcast channel that is set to be received by any radio terminal located within an area of the radio base station device or a time-slot  
10        corresponding to the first media access control identifier.

4.    The radio base station device of claim 1, further comprising:

15        a third allocation unit configured to allocate a broadcast media access control identifier to be received by any radio terminal located within an area of the radio base station device; and

20        a notification unit configured to notify any radio terminal located within the area of the radio base station device to receive the broadcast media access control identifier, using a radio control broadcast channel that is set to be received by any radio terminal located within the area of the radio base station device.

25    5.    The radio base station device of claim 1, wherein the second allocation unit allocates a media access control identifier that is set to be received by any radio terminal located within an area of the radio base station device as the second media access control identifier.

30    6.    The radio base station device of claim 1, wherein the reception unit receives the connection request that contains a multicast connection request, from said one radio terminal.

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7. The radio base station device of claim 1, further comprising a set up unit configured to set up a datalink connection with respect to said one radio terminal,

wherein the second allocation unit allocates a set of  
5 the second media access control identifier and a datalink connection identifier to the identifier of the multicast information,

the first transmission unit transmits the  
correspondence information regarding a correspondence  
10 between the identifier of the multicast information and the set of the second media access control identifier and the datalink connection identifier, and

the second transmission unit transmits a time-slot  
corresponding to the set of the second media access control  
15 identifier and the datalink connection identifier with the multicast information loaded thereon.

8. The radio base station device of claim 1, further comprising:

20 a set up unit configured to set up a datalink connection with respect to said one radio terminal; and

a fourth allocation unit configured to allocate  
another media access control identifier different from  
those already allocated by the first, second and fourth  
25 allocation units, to a datalink control information with respect to the user information,

wherein the first transmission unit transmits said  
another media access control identifier as a media access  
control identifier for the datalink information with  
30 respect to the user information.

9. The radio base station device of claim 1, further comprising a set up unit configured to set up a datalink connection with respect to said one radio terminal,

35 wherein the second allocation unit sets a value that

is unused as a datalink connection identifier for datalink control of received information, as a value of the datalink connection identifier to be allocated to the identifier of the multicast information, with respect to said one radio terminal which receives the multicast information using a time-slot corresponding to the first media access control identifier.

10. A radio terminal device, comprising:

10 a transmission unit configured to transmit a connection request to a radio base station;

a first reception unit configured to receive a first media access control identifier allocated to the radio terminal device, which is broadcast from the radio base station;

15 a second reception unit configured to receive an identifier of a multicast information to be received by a plurality of radio terminals and a second media access control identifier allocated to the identifier of the multicast information, which are transmitted from the radio base station; and

a third reception unit configured to receive a user information destined to the radio terminal device which is loaded on a time-slot corresponding to the first media access control identifier, and the multicast information which is loaded on a time-slot corresponding to the second media access control identifier.

11. The radio terminal device of claim 10, wherein the second reception unit receives the identifier of the multicast information and the second media access control identifier using a radio control broadcast channel that is set to be received by any radio terminal located within an area of the radio base station device.

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12. The radio terminal device of claim 10, wherein the second reception unit receives the second media access control identifier as the user information destined to the radio terminal device.

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13. The radio terminal device of claim 10, further comprising a fourth reception unit configured to receive a broadcast media access control identifier to be received by any radio terminal located within an area of the radio base station,

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wherein the third reception unit also receives information loaded on a time-slot corresponding to the broadcast media access control identifier.

14. The radio terminal device of claim 10, wherein the transmission unit transmits the connection request that contains a multicast connection request.

15. The radio terminal device of claim 10, further comprising a set up unit configured to set up a datalink connection with respect to the radio base station,

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wherein the second reception unit receives the identifier of the multicast information and a set of the second media access control identifier and a datalink connection identifier allocated to the identifier of the multicast information, and

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the third reception unit receives the multicast information loaded on a time-slot corresponding to the set of the second media access control identifier and the datalink connection identifier.

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16. The radio terminal device of claim 10, further comprising:

a set up unit configured to set up a datalink connection with respect to the radio base station;

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a fifth reception unit configured to receive a third media access control identifier allocated to an identifier of a datalink control information for the multicast information loaded on a time-slot corresponding to the second media access control identifier; and

a second transmission unit configured to transmit the datalink control information for the multicast information, using a time-slot corresponding to the third media access control identifier.

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17. The radio terminal device of claim 10, further comprising:

a set up unit configured to set up a datalink connection with respect to the radio base station; and

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a third transmission unit configured to transmit the datalink control information for the multicast information, using a time-slot corresponding to the first media access control identifier.

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18. A method of information communication from a radio base station to a radio terminal, comprising the steps of:

making a connection request from the radio terminal to the radio base station;

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allocating a first media access control identifier which is an unused media access control identifier, to the radio terminal, at the radio base station which received the connection request;

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transmitting a correspondence between the first media access control identifier and the radio terminal, from the radio base station to the radio terminal;

transmitting a user information from the radio base station to the radio terminal using a time-slot corresponding to the first media access control identifier;

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allocating a second media access control identifier to a multicast information to be received by a plurality of

radio terminals, at the radio base station;

transmitting a correspondence information for enabling  
said plurality of radio terminals to recognize a  
correspondence between the second media access control

5 identifier and the identifier of the multicast information;  
and

transmitting the multicast information from the radio  
base station to said plurality of radio terminals using a  
time-slot corresponding to the second media access control  
10 identifier.

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